

MINimage: Micro-cameras for Applications of the Future



Background

Over the past several years, **new, miniaturized cameras** have been launched on the market for a number of different **applications**, most notably in the multimedia industry.

The **cost and energy consumption of these devices has been divided by ten** in the space of a few years, while their **volume is a thousand times less** than that of the digital image sensors of the previous generation. Today, half of all mobile phones are equipped with these micro-cameras.

A wide variety of industries, including **automobile manufacturing, security, and medicine**, have demonstrated high demand for micro-cameras. In the future, the devices will enable the complete analysis of images for medical diagnostics, surgery, and safety applications, among others.

Partners

Corporate

ST Microelectronics - Saint-Gobain

SME

DxO Labs - Varioptic

Research laboratories

CEA Leti - CEA List - INRIA Rhône Alpes - Institut d'Optique Graduate School & Laboratoire Hubert Curien (Université Saint-Etienne)

Key figures

Budget: €141 million

Duration: 4 years

Human resources allocated: More than 500 people per year

Innovation

Miniaturize and improve image sensors using a systems-based approach (silicon, optics, mechanical components, and image processing) using:

- **High-definition image sensors** (5 to 8 megapixels) manufactured using ultra-light-sensitive nanometric CMOS technology
- **Highly-innovative optical assemblies** with **robust, miniaturized autofocus** capabilities
- An innovative and more productive process for assembling the sensor and optics

MINimage will also:

Create a global micro-camera industry based in Europe, involving global industry leaders, innovative SMEs, and public research institutes at the forefront of scientific research in the field

Generate revenue for the virtual economy via mobile telephony operators and associated services

